

RECEIVED
FEB 11 2003
TECHNIER 1600/2900
1600

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/509,482B

DATE: 02/03/2003
TIME: 11:00:43

Input Set : D:\Seqlist.txt
Output Set: N:\CRF4\02032003\I509482B.raw

4 <110> APPLICANT: Crofts, Linda Anne
5 Hancock, Manuela S.
6 Morrison, Nigel A.
7 Eisman, John A.
9 <120> TITLE OF INVENTION: Isoforms of the Human Vitamin D Receptor
12 <130> FILE REFERENCE: RICE-014
14 <140> CURRENT APPLICATION NUMBER: 09/509,482B
15 <141> CURRENT FILING DATE: 2000-09-15
17 <150> PRIOR APPLICATION NUMBER: PCT/AU98/00817
18 <151> PRIOR FILING DATE: 1998-09-29
20 <150> PRIOR APPLICATION NUMBER: P09500
21 <151> PRIOR FILING DATE: 1997-09-29
23 <160> NUMBER OF SEQ ID NOS: 20
25 <170> SOFTWARE: FastSEQ for Windows Version 4.0
27 <210> SEQ ID NO: 1
28 <211> LENGTH: 106
29 <212> TYPE: DNA
30 <213> ORGANISM: Homo sapiens
32 <400> SEQUENCE: 1
33 gttccttct tctgtcgggg cgcctggca tggagtggag gaataagaaa aggagcgatt 60
34 ggctgtcgat ggtgctcaga actgctggag tggaggggtgt gtaacc 106
36 <210> SEQ ID NO: 2
37 <211> LENGTH: 1463
38 <212> TYPE: DNA
39 <213> ORGANISM: Homo sapiens
41 <400> SEQUENCE: 2
42 gttccttct tctgtcgggg cgcctggca tggagtggag gaataagaaa aggagcgatt 60
43 ggctgtcgat ggtgctcaga actgctggag tggaggaagc ctttgggtct gaagtgtctg 120
44 ttagaccta cagaagagca cccctggct ccacttacct gccccctgtct cttcaggga 180
45 tggaggcaat ggcggccagc acttccctgc ctgaccctgg agactttgac cggAACGTGC 240
46 cccggatctg tggggtgtgt ggagaccgag ccactggctt tcacttcaat gctatgaccc 300
47 gtgaaggctg caaaggcttc ttccaggcgaa gcatgaagcg gaaggcacta ttccacccgtcc 360
48 ctttcaacgg ggactgccgc atcaccagg acaaccgacg ccactgccag gcctgccggc 420
49 tcaaaccgtg tggacatc ggcattatc agggatccat tctgacatg gaggaagtgc 480
50 agaggaagcg ggagatgatc ctgaagcgaa aggaggagga ggccttgaag gacagtctgc 540
51 ggcccaagct gtctgaggag cagcagcgca tcattgcccactgctggac gcccaccata 600
52 agacctacga ccccacctac tccgacttct gccagttccg gcctccaggct cgtgtgaatg 660
53 atggtggagg gagccatctt tccaggccca actccagaca cactcccagc ttctctgggg 720
54 actcctcctc ctccatgtca gatcactgtt tcaccccttc agacatgtt gactcgtcca 780
55 gcttctccaa tctggatctg agtgaagaag attcagatga cccttctgtg acccttagagc 840
56 tgtcccagct ctccatgtctt ccccacctgg ctgaccctggt cagttacagc atccaaaagg 900
57 tcattggctt tgctaaatgtt ataccaggat tcagagaccc cacctctggag gaccagatcg 960
58 tactgctgaa gtcaagtgcc attgaggtca tcatgttgcg ctccaaatgtt gtccttcacca 1020

ENTERED

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/509,482B

DATE: 02/03/2003
TIME: 11:00:43

Input Set : D:\Seqlist.txt
Output Set: N:\CRF4\02032003\I509482B.raw

59	tggacgacat gtcctggacc tggcaacc aagactacaa gtaccgcgtc agtacgtga	1080
60	ccaaagccgg acacagcctg gagctgattt agcccctcat caagttccag gtggactga	1140
61	agaagctgaa cttgcattttt gaggaggatg tcctgctcat gccatctgc atcgctccc	1200
62	cagatcgcc tgggtgcag gacgcccgc tgatttggc catccaggac cgcctgtcca	1260
63	acacactgca gacgtacatc cgctgccgc acccgccccc gggcagccac ctgcctatg	1320
64	ccaagatgtat ccagaagcta gccgacctgc gcagcctcaa tgaggagcac tccaaggcgt	1380
65	accgctgcct ctccttccag ctttgcgca gcatgaagct aacgcccctt gtgcgtcgaag	1440
66	tgtttggcaa tgagatctcc tga	1463
68	<210> SEQ ID NO: 3	
69	<211> LENGTH: 1382	
70	<212> TYPE: DNA	
71	<213> ORGANISM: Homo sapiens	
73	<400> SEQUENCE: 3	
74	gttccttct tctgtcgggg cgccctggca tggagtggag gaataagaaa aggagcgatt	60
75	ggctgtcgat ggtgctcaga actgtcggag tggagggat ggaggcaatg gcggccagca	120
76	cttccctgcc tggccatggaa gactttgacc ggaacgtgcc ccggatctgt ggggtgttg	180
77	gagaccgagc cactggctt cacttcaatg ctatgacctg tgaaggctgc aaaggcttct	240
78	tcaggcgaag catgaagcgg aaggcactat tcacctgccc cttcaacggg gactgcccga	300
79	tcaccaagga caaccgacgc cactgccagg cctggcgct caaacgctgt gtggacatcg	360
80	gcatgtgaa ggagttcatt ctgacagatg aggaagtgc gaggaaaggc gagatgtatcc	420
81	tgaagcggaa ggaggaggag gccttgaagg acagtctgcg gccaaagctg tctgaggagc	480
82	agcagcgcattt cattggccata ctgctggacccc accaccataa gacctacgac cccacact	540
83	ccgacttctg ccagttccgg cctccagttt gtgtgaatga tgggtggaggg agccatcctt	600
84	ccaggcccaa ctccagacac actcccagct tctctggga ctccctcc tcctgctcag	660
85	atactgtat cacctttca gacatgtatgg actcgccatc cttctccaaat ctggatctga	720
86	gtgaagaaga ttcatgtac ctttctgtga cccttagagct gtcccgatc tccatgtc	780
87	cccacctggc tgacctggc agttacagca tccaaaaggt cattggctt gctaagatga	840
88	taccaggatt cagagaccc acctctgagg accagatcgt actgtcgtaa tcaagtgc	900
89	ttgaggtcat catgtcgc tccatgtatgg ctttccatgg gacatgcatg tcctggac	960
90	gtggcaacca agactacaatg taccgcgtca gtacgtgac caaagccggg cacagcctgg	1020
91	agctgttgc gcccctcata aagttccagg tggactgaa gaagctgaatg ttgcgttgc	1080
92	aggagcatgt cctgtcatg gccatctgc tcgtctcccc agatgtctt ggggtgcagg	1140
93	acgcccgcgtt gattgaggacc atccaggacc gcctgtccaa cacactgcac acgtacatcc	1200
94	gctgcccca cccggccccc ggcagccacc tgctctatgc caagatgtac cagaagctag	1260
95	ccgacctgcg cagcctcaat gaggaggactt ccaagcgtt cccgtccctc tccttccac	1320
96	ctgactgtac catgaagcta acggccctt tgctcgtaaatgt gtttggcaat gagatctc	1380
97	ga	1382
99	<210> SEQ ID NO: 4	
100	<211> LENGTH: 1534	
101	<212> TYPE: DNA	
102	<213> ORGANISM: Homo sapiens	
104	<400> SEQUENCE: 4	
105	gttccttct tctgtcgggg cgccctggca tggagtggag gaataagaaa aggagcgatt	60
106	ggctgtcgat ggtgctcaga actgtcggag tggagggat ggaggcaatg gcggccagca	120
107	cttccctgcc tggccatggaa gactttgacc ggaacgtgcc ccggatctgt ggggtgttg	180
108	gagaccgagc cactggctt cacttcaatg ctatgacctg tgaaggctgc aaaggcttct	240
109	tcaggtgaccc cccctccaaat ggttgccttccatgg aagttggaaagg gaggagaag aagcaagggt	300
110	tttccatggaa gggagccctt gcatcttc ctttacatgtt ccatggaaaca	360
111	tgcggcgctc acagccacag gagcaggagg gtcttggcga agcatgtac ggaaggact	420

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/509,482B

DATE: 02/03/2003

TIME: 11:00:43

Input Set : D:\Seqlist.txt

Output Set: N:\CRF4\02032003\I509482B.raw

112	attcacctgc	cccttcaacg	gggactgccc	catcaccaag	gacaaccgac	gccactgcca	480
113	ggcctccgg	ctcaaacgct	gtgtggacat	cgcatgatg	aaggagttca	ttctgacaga	540
114	tgaggaagtg	cagaggaagc	gggagatgat	cctgaagcgg	aaggaggagg	aggccttcaa	600
115	ggacagtctg	cggcccaagc	tgtctgagga	gcagcagcgc	atcattgcca	tactgctgga	660
116	cgcaccat	aagacctacg	accccaccta	ctccgacttc	tgccagttcc	ggcctccagg	720
117	tcgtgtgaat	gatgggtggag	ggagccatcc	ttccaggccc	aactccagac	acactccca	780
118	cttctctggg	gactccctcct	cctcctgctc	agatcactgt	atcaccttt	cagacatgat	840
119	ggactcgtcc	agcttctcca	atctggatct	gagtgaagaa	gattcagatg	acccttctgt	900
120	gaccctagag	ctgtcccagc	tctccatgtc	gccccaccc	gctgacccctgg	tcaagttacag	960
121	catccaaaag	gtcattggct	ttgctaagat	gataccagga	ttcagagacc	tcacctctga	1020
122	ggaccagatc	gtactgctga	agtcaagtgc	cattgaggc	atcatgttgc	gctccaaatqa	1080
123	gtccttcacc	atggacgaca	tgtcctggac	ctgtggcaac	caagactaca	agtaccgcgt	1140
124	cagtgacgtg	accaaagccg	gacacagcct	ggagctgatt	gagccctca	tcaagttcca	1200
125	ggtgggactg	aagaagctga	acttgcata	ggaggagcat	gtcctgctca	tggccatctg	1260
126	catcgctcc	ccagatcg	ctggggtgca	ggacccgcgc	ctgattgagg	ccatccagga	1320
127	ccgcctgtcc	aacacactgc	agacgtacat	ccgtgcccgc	cacccgc	cggcagcca	1380
128	cctgctctat	gccaagatga	tccagaagct	agccgaccc	cgcagcc	atgaggagca	1440
129	ctccaaggcag	taccgctg	tctccttca	gcctgagtc	agcatgaagc	taacgccc	1500
130	tgtgctcgaa	gtgttggca	atgagatctc	ctgaa			1534
132	<210>	SEQ ID NO:	5				
133	<211>	LENGTH:	207				
134	<212>	TYPE:	DNA				
135	<213>	ORGANISM:	Homo sapiens				
137	<400>	SEQUENCE:	5				
138	tgcaccttgc	gcgggtggcc	tggggacagg	ggtgaggcc	gagacggacg	gacgcagggg	60
139	cccgcccaa	ggcgagggg	aacagccgca	ctaaggcaga	aaggaagagg	gcgggtgttt	120
140	caccgcagc	ccaatccatc	actcagcaac	tcctagacgc	tggtagaaag	ttctcccgag	180
141	gaggctgcca	tccagtcgt	cgtgcag				207
143	<210>	SEQ ID NO:	6				
144	<211>	LENGTH:	167				
145	<212>	TYPE:	DNA				
146	<213>	ORGANISM:	Homo sapiens				
148	<400>	SEQUENCE:	6				
149	aggcagcatg	aaacagtggg	atgtcagag	agaagatctg	ggtccagtag	ctctgacact	60
150	cctcagctgt	agaaaccc	actctgc	acatcgtt	tacaatggaa	cggat	120
151	tactcttcat	gtctgaaaag	gctatgataa	agatcaagta	agatatt		167
153	<210>	SEQ ID NO:	7				
154	<211>	LENGTH:	1574				
155	<212>	TYPE:	DNA				
156	<213>	ORGANISM:	Homo sapiens				
158	<400>	SEQUENCE:	7				
159	tgcaccttgc	gcgggtggcc	tggggacagg	ggtgaggcc	gagacggacg	gacgcagggg	60
160	cccgcccaa	ggcgagggg	aacagccgca	ctaaggcaga	aaggaagagg	gcgggtgttt	120
161	caccgcagc	ccaatccatc	actcagcaac	tcctagacgc	tggtagaaag	ttctcccgag	180
162	gaggctgcca	tccagtcgt	cgtgcaga	ccttgggtc	tgaagtgtt	gtgagac	240
163	acagaagagc	acccctggc	tccacttacc	tgccccctgc	tccttcagg	atggaggca	300
164	tggcggccag	cacttccctg	cctgaccctg	gagacttga	ccgaaacgtg	ccccggatct	360
165	gtgggggtgt	tggagaccga	gccactggct	ttcacttcaa	tgctatgacc	tgtgaaggct	420
166	gcaaggcctt	cttcaggcga	agcatgaagc	ggaaggcact	attcacctgc	cccttcaacg	480

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/509,482B

DATE: 02/03/2003
TIME: 11:00:43

Input Set : D:\Seqlist.txt
Output Set: N:\CRF4\02032003\I509482B.raw

167	gggactgccg	catcaccaag	gacaaccgac	gccactgcc	ggcctgccgg	ctcaaacgct	540										
168	gtgtggacat	cgccatgatg	aaggagttca	ttctgacaga	tgaggaagt	cagaggaagc	600										
169	gggagatgtat	cctgaagcgg	aaggaggagg	aggccttcaa	ggacagtctg	cgccccaaagc	660										
170	tgtctgagga	gcagcagcgc	atcattgcc	tactgctgga	cgccccaccat	aagacctacg	720										
171	accccaccta	ctccgacttc	tgccagttcc	ggcctccagt	tcgtgtgaat	gatgggtggag	780										
172	ggagccatcc	ttccaggccc	aactccagac	acactcccag	cttctctggg	gactcctccct	840										
173	cctcctgctc	agatcactgt	atcacctctt	cagacatgat	ggactcgctcc	agcttctcca	900										
174	atctggatct	gagtgaagaa	gattcagatg	acccttctgt	gaccctagag	ctgtcccagc	960										
175	tctccatgct	gccccacact	gctgacctgg	tcagttacag	catccaaaag	gtcattggct	1020										
176	ttgctaagat	gataccagga	ttcagagacc	tcacctctga	ggaccagatc	gtactgctga	1080										
177	agtcaagtgc	cattgaggc	atcatgttgc	gctccaatga	gtccttcacc	atggacgaca	1140										
178	tgtcctggac	ctgtggcaac	caagactaca	agtaccgcgt	cagtgacgt	acccaaagccg	1200										
179	gacacagcct	ggagctgatt	gagccctca	tcaagttcca	ggtgggactg	aagaagctga	1260										
180	acttgcata	ggaggagcat	gtcctgctca	tggccatctg	catcgctctcc	ccagatcg	1320										
181	ctggggtgca	ggacgcccgc	ctgattgagg	ccatccagga	ccgcctgtcc	aacacactgc	1380										
182	agacgtacat	ccgctgcccgc	cacccgcccc	cgggcagcca	cctgctctat	gccaaagatga	1440										
183	tccagaagct	agccgacact	cgcagcctca	atgaggagca	ctccaaggcag	taccgctgcc	1500										
184	tctccttcca	gcctgagtgc	agcatgaagc	taacgcccct	tgtgctcgaa	gtgtttggca	1560										
185	atgagatctc	ctga					1574										
187	<210>	SEQ ID NO:	8														
188	<211>	LENGTH:	122														
189	<212>	TYPE:	DNA														
190	<213>	ORGANISM:	Homo sapiens														
192	<400>	SEQUENCE:	8														
193	ggctcctgaa	cctagccag	ctggacggag	aaatggactc	tagcctcctc	tgatagcctc	60										
194	atgccaggcc	ccgtgcacat	tgcttgctt	gcctccctca	atcctcatag	cttctctttg	120										
195	gg						122										
197	<210>	SEQ ID NO:	9														
198	<211>	LENGTH:	477														
199	<212>	TYPE:	PRT														
200	<213>	ORGANISM:	Homo sapiens														
202	<400>	SEQUENCE:	9														
203	Met	Glu	Trp	Arg	Asn	Lys	Lys	Arg	Ser	Asp	Trp	Leu	Ser	Met	Val	Leu	
204	1				5				10			15					
205	Arg	Thr	Ala	Gly	Val	Glu	Glu	Ala	Phe	Gly	Ser	Glu	Val	Ser	Val	Arg	
206						20			25			30					
207	Pro	His	Arg	Arg	Ala	Pro	Leu	Gly	Ser	Thr	Tyr	Leu	Pro	Pro	Ala	Pro	
208							35		40			45					
209	Ser	Gly	Met	Glu	Ala	Met	Ala	Ala	Ser	Thr	Ser	Leu	Pro	Asp	Pro	Gly	
210							50		55			60					
211	Asp	Phe	Asp	Arg	Asn	Val	Pro	Arg	Ile	Cys	Gly	Val	Cys	Gly	Asp	Arg	
212							65		70			75			80		
213	Ala	Thr	Gly	Phe	His	Phe	Asn	Ala	Met	Thr	Cys	Glu	Gly	Cys	Lys	Gly	
214							85			90			95				
215	Phe	Phe	Arg	Arg	Ser	Met	Lys	Arg	Lys	Ala	Leu	Phe	Thr	Cys	Pro	Phe	
216							100		105			110					
217	Asn	Gly	Asp	Cys	Arg	Ile	Thr	Lys	Asp	Asn	Arg	Arg	His	Cys	Gln	Ala	
218							115		120			125					
219	Cys	Arg	Leu	Lys	Arg	Cys	Val	Asp	Ile	Gly	Met	Met	Lys	Glu	Phe	Ile	

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/509,482B

DATE: 02/03/2003
TIME: 11:00:43

Input Set : D:\Seqlist.txt
Output Set: N:\CRF4\02032003\I509482B.raw

220 130 135 140
 221 Leu Thr Asp Glu Glu Val Gln Arg Lys Arg Glu Met Ile Leu Lys Arg
 222 145 150 155 160
 223 Lys Glu Glu Glu Ala Leu Lys Asp Ser Leu Arg Pro Lys Leu Ser Glu
 224 165 170 175
 225 Glu Gln Gln Arg Ile Ile Ala Ile Leu Leu Asp Ala His His Lys Thr
 226 180 185 190
 227 Tyr Asp Pro Thr Tyr Ser Asp Phe Cys Gln Phe Arg Pro Pro Val Arg
 228 195 200 205
 229 Val Asn Asp Gly Gly Ser His Pro Ser Arg Pro Asn Ser Arg His
 230 210 215 220
 231 Thr Pro Ser Phe Ser Gly Asp Ser Ser Ser Cys Ser Asp His Cys
 232 225 230 235 240
 233 Ile Thr Ser Ser Asp Met Met Asp Ser Ser Ser Phe Ser Asn Leu Asp
 234 245 250 255
 235 Leu Ser Glu Glu Asp Ser Asp Asp Pro Ser Val Thr Leu Glu Leu Ser
 236 260 265 270
 237 Gln Leu Ser Met Leu Pro His Leu Ala Asp Leu Val Ser Tyr Ser Ile
 238 275 280 285
 239 Gln Lys Val Ile Gly Phe Ala Lys Met Ile Pro Gly Phe Arg Asp Leu
 240 290 295 300
 241 Thr Ser Glu Asp Gln Ile Val Leu Leu Lys Ser Ser Ala Ile Glu Val
 242 305 310 315 320
 243 Ile Met Leu Arg Ser Asn Glu Ser Phe Thr Met Asp Asp Met Ser Trp
 244 325 330 335
 245 Thr Cys Gly Asn Gln Asp Tyr Lys Tyr Arg Val Ser Asp Val Thr Lys
 246 340 345 350
 247 Ala Gly His Ser Leu Glu Leu Ile Glu Pro Leu Ile Lys Phe Gln Val
 248 355 360 365
 249 Gly Leu Lys Lys Leu Asn Leu His Glu Glu Glu His Val Leu Leu Met
 250 370 375 380
 251 Ala Ile Cys Ile Val Ser Pro Asp Arg Pro Gly Val Gln Asp Ala Ala
 252 385 390 395 400
 253 Leu Ile Glu Ala Ile Gln Asp Arg Leu Ser Asn Thr Leu Gln Thr Tyr
 254 405 410 415
 255 Ile Arg Cys Arg His Pro Pro Pro Gly Ser His Leu Leu Tyr Ala Lys
 256 420 425 430
 257 Met Ile Gln Lys Leu Ala Asp Leu Arg Ser Leu Asn Glu Glu His Ser
 258 435 440 445
 259 Lys Gln Tyr Arg Cys Leu Ser Phe Gln Pro Glu Cys Ser Met Lys Leu
 260 450 455 460
 261 Thr Pro Leu Val Leu Glu Val Phe Gly Asn Glu Ile Ser
 262 465 470 475
 264 <210> SEQ ID NO: 10
 265 <211> LENGTH: 450
 266 <212> TYPE: PRT
 267 <213> ORGANISM: Homo sapiens
 269 <400> SEQUENCE: 10
 270 Met Glu Trp Arg Asn Lys Lys Arg Ser Asp Trp Leu Ser Met Val Leu

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/509,482B

DATE: 02/03/2003

TIME: 11:00:44

Input Set : D:\Seqlist.txt

Output Set: N:\CRF4\02032003\I509482B.raw